ACRONYMS, ABBREVIATIONS, AND CONVERSION CHARTS

ACGIH American Conference of Governmental Industrial Hygienists

ACI American Concrete Institute
ADC Air Diffusion Council
ADL Additional Dynamic Loads

AEC U.S. Atomic Energy Commission (predecessor of ERDA, DOE, and NRC)

AFI Air Filter Institute

AGS American Glovebox Society
AgX silver-exchanged zeolite
AHJ Authority Having Jurisdiction
AISI American Iron and Steel Institute

AISC American Institute of Steel Construction

ALAP as low as practicable (obsolete term for ALARA)

ALARA as low as reasonably achievable

AMCA Air Moving and Conditioning Association
AMD aerodynamic mean diameter (of particles)

ANS American Nuclear Society

ANSI American National Standards Institute

APA American Plywood Association

ASHRAE American Society of Heating, Refrigerating, and Air Conditioning Engineers

ASME American Society of Mechanical Engineers
ASTM American Society for Testing and Materials

AWS American Welding Society

BET Brunauer, Emmett, and Teller (test for surface area of adsorbents)

BWR boiling water reactor
CAM continuous air monitors

CBR chemical, biological, and radiological (filter)

CFD continuous fire detector
CFR Code of Federal Regulations

CG concentration guide CH₃I Methyl iodide

CONAGT Committee on Nuclear Air and Gas Treatment (a subcommittee of ASME)

CRSI Concrete Reinforced Steel Institute
CVS Confinement Ventilation System

CWS U.S. Army Chemical Warfare Service Laboratories

DAC derived air concentration
DBA design basis accident

DBE design basis earthquake
DBS deep-bed sand (filter)
DBGF deep-bed glass fiber (filter)
DF decontamination factor
DoD Department of Defense
DOE U.S. Department of Energy

DOP dioctyl phthalate
DP differential pressure

DNFSB Defense Nuclear Facilities Safety Board

DPD design pressure differential

DSA Documented Safety Analysis (replaces the term SAR)

ECCS Emergency Core Cooling System

EL external loads

ERDA Energy Research and Development Administration

ES equipment specification ESF engineered safety feature

ESP electrostatic Precipitator (prefilter)

FHA Fire Hazard Analysis
FML Fluid Momentum Loads
FRP fiber-reinforced plastic
FTF Filter Test Facility

GFRP Glass-Fiber-Reinforced Plastic HEMF high-efficiency metal filter

HEPA high-efficiency particulate air (filter)
HEPA-Vac HEPA Vacuum Cleaning Systems/Units

HF hydrogen fluoride

HFATS High Flow Alternative Test System
HVAC heating, ventilating, and air conditioning

HWESF Hanford Waste Encapsulation and Storage Facility

IAEA International Atomic Energy Agency

IBC International Building Code

IEEE Institute of Electrical and Electronic Engineers

IEST Institute of Environmental Sciences and Technology

IPF Iodine Protection Factor

KI potassium iodide

Kr Krypton

LANL Los Alamos National Laboratory LCO limiting conditions for operation

LEL lower explosive limit LER Licensee Event Report

LMD light scattering mean diameter

LMFBR liquid-metal fast breeder reactor

LOCA loss-of-coolant accident LWR light water reactor

MCE maximum considered earthquake **MCFL** Maximum Credible Fire Loss

MERV Minimum Efficiency Reporting Value **MMD** mass median diameter (of particles) **MPC** maximum permissible concentration

MPFL maximum possible fire loss **MPPS** Most Penetrating Particle Size

NACE National Association of Corrosion Engineers

NBS National Bureau of Standards **NCIG** Nuclear Construction Issues Group **NDRC** National Defense Research Council **NEC**

NEMA National Electrical Manufactures Association

Nuclear Air Cleaning Conference

National Fire Protection Association **NFPA**

NIST National Institutes of Science and Technology

NMD number mean diameter (of particles) **NOPD** normal operating pressure differential

NPH natural phenomena hazards NQA Nuclear Quality Assurance

NRC U.S. Nuclear Regulatory Commission **NRL** U.S. Naval Research Laboratory

NRR noise reduction rating

NSIC Nuclear Safety Information Center **NSSS** Nuclear Steam Supply System OBE operating basis earthquake **ORFTF** Oak Ridge Filter Test Facility **ORNL** Oak Ridge National Laboratory

OSHA Occupational Safety and Health Administration

PAO Polyalphaolefin

PC performance category PEL permissible exposure limit **PHFS** portable HEPA filtration system **PPE** personal protective equipment

PPH Precipitation Hardening (grade of stainless steel)

PSHA Probabilistic Seismic Hazard Analysis

PSL Polystyrene Latex **PSS** Passive Safe Shutdown **PVC** polyvinyl chloride

PWR pressurized water reactor QA quality assurance

QAS quality assurance station

QC quality control

QPL qualified product list

RFETS Rocky Flats Environmental Technology Site

RFFTF Rocky Flats Filter Test Facility

RG Regulatory Guide RH relative humidity

RPP radiation protection program

RSCV removable surface contamination value RSIC Reactor Shielding Information Center

RTP Rapid-Transfer Port

RTV room temperature vulcanizing RWP radiological work permit

SBMS Standards Based Management Systems

SMACNA Sheet Metal and Air Conditioning Contractors' National Association

SMP Size of Maximum Penetration SOP standard operating procedure

SOPD System Operating Pressure Differential

SRL Savannah River Laboratory
SRP Standard Review Plan
SRS Savannah River Site

SSC Structures, Systems, and Components

SSE safe shutdown earthquake

SSPC Steel Structures Painting Council (now the Society of Protective Coating)

TAPPI Technical Association of the Pulp and Paper Industry

TEDA triethylene diamine

TEFC totally enclosed fan cooled

TLV threshold limit value
TMI Three Mile Island

TURF Thorium-Uranium Recycle Facility
UL Underwriters Laboratories, Inc.
ULPA ultra low penetration air (filter)
VLSI Very Large-Scale Integrated
VOC volatile organic chemical

WESF Waste Encapsulation and Storage Facility (Hanford B-Plant)

WWII World War II

Xe Xenon

Units of Measure and Metric Equivalents Used in This Handbook

acfm actual cubic feet per minute

BTU British thermal unit

cfm cubic feet per minute $= x \cdot 0.000472 = m^3/\text{sec}$ cubic meters per second

Ci curies

dBA decibel A-weighted

fpm feet per minute x 0.00508 = m/sec meters per second

ft feet x = 0.3048 = m meters

ft² square feet $x = 0.09290 = m^2$ square meters

ft³ cubic feet x 28.32 = L Liter

 $x 0.02832 = m^3$ cubic meters

gpm gallons per minute

Hz Hertz

in. inch x = 2.54 = cm centimeters

in.wc inches water column

in.wg inches water gauge x = 0.24836 = kPa kilopascals

kPa kilopascals mCi millicuries

mm millimeter, 0.001 inch
m³/hr cubic meters per hour
mmwg millimeter water gauge
m/s² meters per seconds squared

pH percent hydrogen (measure of acidity/alkalinity), power of the hydrogen ion

ppm parts per million

psi pounds per square inch

psia pounds per square inch absolute psig pounds per square inch in gauge

rem/hr rems (roentgen equivalent man) per hour

scfm standard cubic feet per minute

μCi microcuriesμg microgramsμin microinchμm micrometer

vpm volume parts per million